

CLAIMS

1. Method for exchanging signals via nodes (11-14) and comprising the steps of

5 - at a source node (11), processing a source signal (21,22) and transmitting the source signal (21,22) to a destination node (12) via a first signal route comprising an intermediate node (13,14) and via a different second signal route, with at least one signal route being a wireless signal route;

10 - at the destination node (12), receiving a first destination signal (31) corresponding with the source signal (21,22) and having followed the first signal route;

 - at the destination node (12), receiving a second destination signal (32) corresponding with the source signal (21,22) and having followed the second
15 signal route;

 - at the destination node (12), processing and correlating the first and second destination signal (31,32); and

 - in dependence of a correlation result, adjusting a process for processing a signal at a node (11-14).

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2. Method according to claim 1, wherein the process comprises the processing at the destination node (12).

3. Method according to claim 1, further comprising the step of

25 - at the destination node (12), transmitting, in response to the correlation result, a control signal to the source node (11) for the adjusting of the process;

 wherein the process comprises the processing at the source node (11).

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4. Method according to claim 1, further comprising the steps of

 - at the intermediate node (13,14), receiving an intermediate signal (41,51) corresponding with the source signal (21,22);

- at the intermediate node (13,14), processing the intermediate signal (41,51); and

- at the destination node (12), transmitting, in response to the correlation result, a control signal to the intermediate node (13,14) for the
5 adjusting of the process;

wherein the process comprises the processing at the intermediate node (13,14).

5. Method according to claim 1, further comprising the step of

10 - at a node (11-14), running a learning algorithm for the adjusting of the process.

6. Method according to claim 1, further comprising the steps of

- at the source node (11), generating a label signal for labelling the
15 source signal (21,22) and transmitting the label signal to the destination node (12) via a third signal route different from the first and second signal route; and
- at the destination node (12), detecting the label signal.

7. Method according to claim 1, further comprising the steps of

20 - at the destination node (12), further processing at least two subsignals of at least one destination signal (31,32), which subsignals have followed subroutes of at least one signal route, with these subroutes being different from each other.

25 8. Destination node (12) comprising

- a receiving unit (91-95) for receiving a first destination signal (31) corresponding with a source signal (21,22) and having followed a first signal route comprising an intermediate node (13,14) and for receiving a second destination signal (32) corresponding with the source signal (21,22) and
30 having followed a different second signal route, which source signal (21,22) has been processed and transmitted by a source node (11), and with at least one signal route being a wireless signal route;

- a processing unit (87) for processing the first and second destination signal (31,32);

- a correlating unit (89) for correlating the first and second destination signal (31,32) for, in dependence of a correlation result, adjusting a process for processing a signal at a node (11-14).

9. Destination node (12) according to claim 8, wherein the process comprises the processing by the processing unit (87) at the destination node (12).

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10. Source node (11) comprising

- a processing unit (87) for processing a source signal (21,22);

- a transmitting unit (91-95) for transmitting the source signal (21,22) to a destination node (12); and

15 a receiving unit (91-95) for receiving a control signal from the destination node (12) for adjusting the processing unit (87);

which destination node (12) is arranged to receive a first destination signal (31) corresponding with the source signal (21,22) and having followed a first signal route comprising an intermediate node (13,14) and is arranged to receive a second destination signal (32) corresponding with the source signal (21,22) and having followed a different second signal route, with at least one signal route being a wireless signal route, and which destination node (12) is arranged to process the first and second destination signal (31,32) and is arranged to correlate the first and second destination signal (31,32) and is arranged to, in response to a correlation result, transmit the control signal to the source node (11).

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11. Intermediate node (13,14) comprising

- a processing unit (87) for processing an intermediate signal (41,51);

30 and

- a receiving unit (91-95) for receiving the intermediate signal (41,51) corresponding with a source signal (21,22) transmitted by a source node (11)

to a destination node (12) and for receiving a control signal from the destination node (12) for adjusting the processing unit (87);

which destination node (12) is arranged to receive a first destination signal (31) corresponding with the source signal (21,22) and having followed a first signal route comprising the intermediate node (13,14) and is arranged to receive a second destination signal (32) corresponding with the source signal (21,22) and having followed a different second signal route, with at least one signal route being a wireless signal route, and which destination node (12) is arranged to process the first and second destination signal (31,32) and is arranged to correlate the first and second destination signal (31,32) and is arranged to, in response to a correlation result, transmit the control signal to the intermediate node (13,14).

12. Network which comprises one or more destination nodes (12) as defined by claim 8 and/or 9 and/or one or more source nodes (11) as defined by claim 10 and/or one or more intermediate nodes (13,14) as defined by claim 11.

13. Circuit (90) for use in a destination node (12) comprising a receiving unit (91-95) for receiving a first destination signal (31) corresponding with a source signal (21,22) and having followed a first signal route comprising an intermediate node (13,14) and for receiving a second destination signal (32) corresponding with the source signal (21,22) and having followed a different second signal route, which source signal (21,22) has been processed and transmitted by a source node (11), and with at least one signal route being a wireless signal route, which circuit (90) comprises

- a processing unit (87) for processing the first and second destination signal (31,32);
- a correlating unit (89) for correlating the first and second destination signal (31,32) for, in dependence of a correlation result, adjusting a process for processing a signal at a node (11-14).